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Patent

Case No.: 58046US012

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:

FLEMING, ROBERT J.

Application No.:

10/521827

Group Art Unit:

Unknown

Filed:

August 15, 2003

Examiner:

Unknown

Title:

FLEXIBLE, FORMABLE CONDUCTIVE FILMS

INFORMATION DISCLOSURE STATEMENT

Mail Stop: Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

CERTIFICATE OF MAILING	OR TRANSMISSION	37 CFR § 1.8(a)
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I hereby certify that this correspondence is being:

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May 4, 2005

Signed by: Pamela L. Stewart

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

Copies of any cited foreign patents, foreign publications, non-patent literature documents, and any pending U.S. applications filed before June 30, 2003, are enclosed. Copies of any pending U.S. applications filed after June 30, 2003 that can be accessed on the USPTO's IFW system are not enclosed as per USPTO Waiver dated September 21, 2004. Copies of any U.S. patents and published U.S. patent applications are not enclosed.

It is believed that no fee is due; however, in the event a fee is required, please charge the fee to Deposit Account No. 13-3723.

Respectfully submitt

May 4, 2005

Date

Pamela L. Stewart, Reg. No.: 45,707

Telephone No.: (651) 733-2059

Office of Intellectual Property Counsel 3M Innovative Properties Company Facsimile No.: 651-736-3833

STATEMENT BY APPLICANT

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			U.S. Patent	Documents	
Exam. Init.*	Cite No.	Document Number Doc. Number-(Kind Code if Known)	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US- 3,302,002	01-31-1967	Warren	garangaran
	A2	US- 3,311,517	03-28-1967	Keslar et al.	
	A3	US- 3,529,074	09-15-1970	Lewis	
	A4	US- 3,601,471	08-24-1971	Seddon et al.	
	A5	US- 3,682,528	08-08-1972	Apfel et al.	
	A6	US- 3,752,348	08-14-1973	Dickason et al.	
	A7	US- 3,897,140	07-29-1975	Tuthill	
	A8	US- 3,990,784	11-09-1976	Gelber	
	A9	US- 4,017,661	04-12-1977	Gillery	
	A10	US- 4,166,876	09-04-1979	Chiba et al.	
	A11	US- 4,226,910	10-07-1980	Dahlen et al.	
	A12	US- 4,234,654	11-18-1980	Yatabe et al.	
	A13	US- 4,320,169	03-16-1982	Yatabe et al.	
	A14	US- 4,413,877	11-08-1983	Suzuki et al.	
	A15	US- 4,590,118	05-20-1986	Yatabe et al.	
	A16	US- 4,639,069	01-27-1987	Yatabe et al.	
	A17	US- 4,645,714	02-24-1987	Roche et al.	
	A18	US- 4,696,719	09-29-1987	Bischoff	
	A19	US- 4,722,515	02-02-1988	Ham	
	A20	US- 4,782,216	11-01-1988	Woodard	
	A21	US- 4,786,783	11-22-1988	Woodard	
	A22	US- 4,799,745	01-24-1989	Meyer et al.	·
	A23	US- 4,842,893	06-27-1989	Yializis et al.	
	A24	US- 4,888,061	12-19-1989	Wenz	
	A25	US- 4,910,090	03-20-1990	Kuhlman et al.	
	A26	US- 4,954,371	09-04-1990	Yializis	
	A27	US- 4,965,408	10-23-1990	Chapman et al.	
	A28	US- 4,973,511	11-27-1990	Farmer et al.	

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Date Considered:

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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	A29	US- 5,011,585	04-30-1991	Brochot et al.	rigules Appeal
	A30	US- 5,018,048	05-21-1991	Shaw et al.	
	A31	US- 5,032,461	07-16-1991	Shaw et al.	
	A32	US- 5,071,206	12-10-1991	Hood et al.	
	A33	US- 5,085,141	02-04-1992	Triffaux	
	A34	US- 5,097,800	03-24-1992	Shaw et al.	
	A35	US- 5,125,138	06-30-1992	Shaw et al.	
	A36	US- 5,260,095	11-09-1993	Affinito	
	A37	US- 5,324,374	06-28-1994	Harmand et al.	
	A38	US- 5,332,888	07-26-1994	Tausch et al.	,
	A39	US- 5,360,659	11-01-1994	Arends et al.	
	A40	US- 5,395,644	03-07-1995	Affinito	
	A41	US- 5,440,446	08-08-1995	Shaw et al.	
	A42	US- 5,489,489	02-06-1996	Swirbel et al.	
-	A43	US- 5,547,508	08-20-1996	Affinito	
	A44	US- 5,681,615	10-28-1997	Affinito et al.	
	A45	US- 5,681,666	10-28-1997	Treger et al.	
	A46	US- 5,686,360	11-11-1997	Harvey, III et al.	
	A47	US- 5,699,188	12-16-1997	Gilbert et al.	
	A48	US- 5,725,909	03-10-1998	Shaw et al.	
	A49	US- 5,744,227	04-28-1998	Bright et al.	
	A50	US- 5,757,126	05-26-1998	Harvey, III et al.	
	A51	US- 5,771,562	06-30-1998	Harvey, III et al.	
	A52	US- 5,773,102	06-30-1998	Rehfeld	
	A53	US- 5,783,049	07-21-1998	Bright et al.	
	A54	US- 5,877,895	03-02-1999	Shaw et al.	
	A55	US- 5,981,059	11-09-1999	Bright et al.	
	A56	US- 6,007,901	12-28-1999	Maschwitz et al.	

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	A57	US- 6,030,671	02-29-2000	Yang et al.		
	A58	US- 6,045,864	04-04-2000	Lyons et al.		
	A59	US- 6,049,419	04-11-2000	Wheatley et al.		
	A60	US- 6,083,628	07-04-2000	Yializis		
	A61	US- 6,111,698	08-29-2000	Woodard et al.		
	A62	US- 6,146,225	11-14-2000	Sheats et al.		
	A63	US- 6,214,422 B1	04-10-2001	Yializis		
	A64	US- 6,231,939 B1	05-15-2001	Shaw et al.		
	A65	US- 6,243,201 B1	06-05-2001	Fleming et al.		
	A66	US- 6,255,003 B1	07-03-2001	Woodard et al.		
	A67	US- 6,268,695 B1	07-31-2001	Affinito		
	A68	US- 6,480,250 B1	11-12-2002	Matsufuji et al.		
	A69	US- 6,483,719	11-19-2002	Bachman		
	A70	US- 6,596,937 B2	07-22-2003	Mazurkiewicz		
	A71	US- 6,621,003 B2	09-16-2003	Yoshida et al.		
	A72	US- 2002/0042162 A1	04-11-2002	Tone et al.		
	A73	US- 2002/0154406 A1	10-24-2002	Merrill et al.		
	A74	US- 2002/0180324 A1	12-05-2002	Yoshida et al.		
	A75	US- 2003/0085649 A1	05-08-2003	Wachi et al.		
	A76	US- 2004/0032658 A1	02-19-2004	Fleming		
	A77	US- 2004/0033369 A1	02-19-2004	Fleming et al.		
	A78	US- 2004/0033675 A1	02-19-2004	Fleming et al.		

	Foreign Patent Documents						
Exam.	Cite	Cite Foreign Patent Document		Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	Translation
Init.*	No.	Ctry. Code	Number-KindCode (If known)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	(Check if yes)
	B1	EP	0 810 452 A2	12-03-1997	Okamura et al.		
	B2	EP	0 873 839 A1	10-28-1998	Ono et al.		
	В3	EP	0 944 299 A2, A3	09-22-1999	Sugizaki et al.	`	

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Init.*		Ctry. Code	Number-KindCode (If known)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	(Check if yes)
	B4	EP	0 977 167 A1	02-02-2000	Yasunori et al.		
	B5	wo	95/10117	04-13-1995	Shaw et al.		
	В6	wo	97/01440	01-16-1997	Gilbert et al.		
	В7	wo	97/01778	01-16-1997	Ouderkirk et al.		
	В8	wo	97/04885	02-13-1997	Affinito et al.		
	В9	wo	98/26927	06-25-1998	Landin et al.		
	B10	wo	99/36248	07-22-1999	Neavin et al.		
	B11	wo	99/36262	07-22-1999	Hebrink et al.		
	B12	wo	00/26973	05-11-2000	Bright		
	B13	wo	00/48749	08-24-2000	Eufinger et al.		
	B14	wo	01/31393 A1	05-03-2001	Epstein et al.		
	B15	wo	01/58989 A1	08-16-2001	McGurran et al.		
	B16	wo	01/96104 A2	12-20-2001	Liu et al.		
	B17	wo	01/96115 A1	12-20-2001	Dietz		

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C1	Presentation: Affinito et al., "Polymer-Oxide Transparent Barrier Layers," SVC 39 th Annual Technical Conference, Paper No. W-12, (1996), pp. 1-6.
	C2	Presentation: Shaw et al., "A New Vapor Deposition Process for Coating Paper and Polymer Webs," Sixth International Vacuum Web Coating Conference, Reno, NV, October 28, 1992, pp. 18-24.
	C3	Presentation: Shaw et al., "A New High Speed Process for Vapor Depositing Acrylate Thin Films: An Update," Society of Vacuum Coaters 36 th Annual Technical Conference (1993), pp. 348-352.
	C4	Presentation: Shaw et al., "Use of Vapor Deposited Acrylate Coatings to Improve the Barrier Properties of Metallized Film," Society of Vacuum Coaters 37 th Annual Technical Conference (1994), pp. 240-247.
	C5	Presentation: Shaw et al., "Use of Evaporated Acrylate Coatings to Smooth the Surface of Polyester and Polypropylene Film Substrates," Rad Tech (1996), (12 pages).

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*	C6	Article: Affinito et al., "Vacuum Deposited Polymer/Metal Multilayer Films for Optical Application," Thin Solid Films, Vol. 270, (1995), pp. 43-48.
	C7	Product Information: "Southwall TM Altair TM M Transparent Conductive Film," (date unknown but is prior to filing date of instant application), 1 page.
	C8	Product Information: "Shielded Windows," Advanced Performance Materials, (date unknown but is prior to filing date of instant application), 1 page.
	C9	Product Information: "EMI Shielding Products," Advanced Performance Materials, (date unknown but is prior to filing date of instant application), 2 pages.
	C10	Technological Information: "EMI Theory," Chomerics, (date unknown but is prior to filing date of instant application), pp. 1-3.
	C11	Technological Information: "Shielding Methods," Chomerics, (date unknown but is prior to filing date of instant application), pp. 1-7.
	C12	Product Information: "Display Products," Southwall Technologies, (date unknown but is prior to filing date of instant application), pp. 1-2.
	C13	Product Information: "BE 9 Shielded Windows," Advanced Performance Materials GMBH, (date unknown but is prior to filing date of instant application), pp. 60-67.
	C14	Book Excerpt: Austin, "Chapter 8: Electromagnetic Compatibility for Electrical Engineering," <u>Electrical Engineer's Reference Book</u> , Butterworth-Heinemann, Oxford, UK, Fifteenth Edition, (1993), pp. 8/3-8/14.
	C15	Book: White and Mardiguian, "Volume 3: Electromagnetic Shielding," A Handbook Series on Electromagnetic Interference and Compatibility, Interference Control Technologies, Inc., Gainesville, Virginia, (1988), title page and table of contents, 12 pages.
	C16	Book: Gnecco, <u>The Design of Shielded Enclosures: Cost-Effective Methods to Prevent EMI</u> , Butterworth-Heinemann, Boston, MA, (2000), title page, table of contents, List of Illustrations, and List of Tables, 13 pages.
	C17	Book: White and Mardiguian, "Volume 8: EMI Control Methodology and Procedures," <u>A Handbook Series on Electromagnetic Interference and Compatibility</u> , Interference Control Technologies, Inc., Gainesville, Virginia, (1989), title page and table of contents, 11 pages.
	C18	Article: Cairns et al., "Strain-Dependent Electrical Resistance of Tin-Doped Indium Oxide on Polymer Substrates," Applied Physics Letters, Vol. 76, No. 11, March 13, 2000, pp. 1425-1427.

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	C19	H.G. Elias, "An Introduction to Plastics", VCH Verlagsgesellaschaft mbH (Weinheim, Germany), 1993 (no month), page 249.

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